THE MORTON ARBORETUM

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GROUND COVER PLANTS, DECORATIVE AND UTILITARIAN

Ground Cover Plants, those indispensable carpeters so useful in problem areas where getting anything to grow presents difficulties, have in many instances an aesthetic value exceeding, or at least equalling, their functional worth.

From the standpoint of foliage alone they offer endless possibilities for dual purpose effects in landscape planting, doubling effectively not only as satisfactory covers but also as elements of design worthy of being featured on this basis alone. Exciting forms, interesting textures and a wide variation in coloring give them definite decorative appeal.

Functionally, a ground cover plant to perform efficiently should provide a solid, even mass of foliage, attractive through the year if evergreen, or during the growing season if deciduous. Plants accomplishing this effect for the most part fit into several categories. Among these are the ground hugging spreaders such as the procumbent Junipers, or the Wintercreepers *(Euonymus)* or Ivies *(Hedera)*, the trailing stems of which propagate themselves by rooting as they creep along; the tufted plants exemplified by the Blue Fescue Grass *(Festuca glauca)* and Lilyturf *(Liriope)*, which develop ever expanding tufts of foliage; the rosette forming group of which the Bugle *(Ajuga)*, Spurge *(Pachysandra)* and Plantainlilies *(Hosta)* are examples; those stoloniferous spreaders with dense, overlapping leaves such as the Wild Ginger *(Asarum)*; and the vigorous sprawlers like the low growing Memorial Rose *(Rosa wichuraiana)*, Halls Japanese Honeysuckle *(Lonicera japonica halliana)*, and American Bittersweet *(Celastrus scandens)*.

The flora of the entire world is represented in the roster of available ground cover materials, and it takes more than heat or cold, sun or shade, moisture or aridity or an excessively alkaline or acid soil to impose limitations which some type of suitable ground cover cannot overcome.

The Morton Arboretum exhibit at the recent Chicago World Flower Show* featured twenty-two desirable ground cover plants, all hardy in the

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area and suited to varied soils, exposures and other planting conditions. Displayed in uniform blocks separated by dividers of washed gravel, they illustrated effectively not only the design potential of this class of plants but also their horticultural individualities.

Ground Covers for locations in shade the year around

Plants with Evergreen Foliage

Ground Covers which hold their foliage the year around are always most in demand, and fortunately there is no scarcity among them. None rates higher than the evergreen wintercreepers *(Euonymus),* stem rooting creepers equally useful as vines or ground covers. Both the Common Wintercreeper *(Euonymus fortunei radicans,* syn. *"acuta"),* with its narrow, prominently veined leaves of deep green, and the even more vigorous Purpleleaf Wintercreeper *(E. fortunei colorata),* whose larger leaves assume purplish coloring in winter, are favorites, tolerating the most adverse conditions. In areas shaded throughout the year they are indispensable, and for planting under shallow rooted trees such as elms or maples, where shade and root competition pose problems, they have no equal. The taller growing, round-leaved Bigleaf Wintercreeper *(Euonymus fortunei vegeta)* may also be used in the same way. There are three hardy evergreen Ivies which also make fine covers in situations sheltered from winter sun. The Baltic Ivy *(Hedera helix baltica),* an especially hardy, dark-leaved, prominently veined geographical selection from the Baltic region, is best known, but the Thorndale Sub-Zero Ivy (*Hedera helix* 'Thorndale Sub-Zero'), with larger, deeper green foliage than *Baltica* and the Bulgarian Ivy (*Hedera helix* 'Bulgarian'), whose still larger leaves are lighter colored, are just as good. Another evergreen cover plant demanding perpetual shade is the Canby Pachistima *(Pachistima Canbyi),* fine-textured shrublet (to one foot) from the southern Alleghenies. It makes a neat cover without clipping, and is especially recommended for planting beneath evergreens. A similar location is also preferred by the Japanese Spurge *(Pachysandra terminalis),* sturdy plant of uniform height whose whorls of dark satiny foliage look well whatever the season. White flowers and white fruit are added attractions. Commonplace though it is, the Myrtle or Periwinkle *(Vinca minor),* is another highly regarded cover. There is something quite satisfying in its modest periwinkle blue flowers and dark, oval-shaped evergreen leaves. Under trees or shrubs, on shaded slopes or on the north side of buildings, it provides a dependable cover. Among its varieties is a white flowered one *("alba"),* one with purplish bloom *("atropurpurea"),* a larger flowered blue, 'Bowles Variety' and 'Barts Bigleaf', characterized by larger foliage.

Ground Covers for locations shaded during the summer, exposed in winter

Plants with Evergreen Foliage

For those planting sites shaded from summer sun, but exposed to it during the winter months, a number of the same materials found in the

*Awarded the Bulkley medal by the Garden Club of America for a distinguished educational display.

"year-round shade" list are also adaptable. This includes the three wintercreepers previously mentioned, the Japanese Pachysandra and the Vincas. The last two may not remain as bright when fully exposed to winter sun, but otherwise will suffer no injurious effects. Although evergreen in the south, where it is a commonly used ground cover, the grassy-leaved Lilyturf *(Liriope spicata),* is only semi-evergreen in this area. Turning brown does not detract from the interesting texture of its foliage, however. It will grow to a height of eight or ten inches, developing thick mats of grass-like tufts. Spikes of purplish-lavender blossoms appear in late summer as an added bonus.

Plants with Deciduous Foliage

Shaded areas requiring a cover effective primarily during the growing season present far less of a problem, a much wider range of less exacting materials simplifying selection.

Universally recognized as one of the easiest and least troublesome of the deciduous covers is the Ajuga, known variously as Bugle-weed, Carpet Bugle or just Bugle. Possessing the faculty of developing solid mats of foliage in a short while, of keeping its dark green coloring until late in the fall and of thriving in almost every type of soil and degree of shade, it is truly the gardener's friend. The height preference desired will determine whether one plants the taller Geneva Bugle *(Ajuga genevensis),* or the prostrate species *reptans,* also blue flowered. The latter is available in both white and pink flowered varieties, but we prefer the blue-spiked, bronze-leaved one *(Ajuga reptans* 'Bronzeleaf') because of the attractive metallic lustre of its purplish foliage. Familiar to many, though not generally known by name, is the Silveredge Bishops Goutweed *(Aegopodium podograria variegatum),* ornamental member of the Parsley family, valued for the soft green coloring of its compound, creamy-margined leaves. Reaching a height of a foot to eighteen inches, it is not a low cover, but one which can do much to lighten dark areas. It will grow in rich or poor soil and in sun or shade. In favored locations it is apt to prove overly aggressive.

For something special in ground covers of about the same height as the Goutweed, consider that dainty Barrenwort or Bishops Cap *(Epimedium pinnatum sulphureum),* herbaceous member of the Barberry family, with delicate pale yellow flowers like bishops' caps and graceful, compound foliage exhibiting unusually handsome bronzy markings in the spring. Preferring partial shade, it is ideal for sheltered spots under trees or for facing shrubbery margins. In such locations its foliage remains presentable until early winter.

In our own woods occurs the little known Running Euonymus *(Euonymus obovata),* a procumbent species whose trailing green interlacing stems make an ideal covering in moist, partially shaded locations. Not only is it valued for its dense, deciduous foliage of light green, but also for the three-lobed, warty fruits whose scarlet arils are so conspicuous in the fall.

Few groups of shade plants have more to offer than the Plantainlilies *(Hostas),* bold-leaved perennials with striking foliage of varied size, color

and texture. The evenly mounded foliage masses are enhanced in summer or fall by spikes of white, lavender or purple flowers. The purplish flowered White-rim Blunt Plantainlily *(Hosta decorata marginata),* whose rounded, blue-green leaves are margined with white, is always a favorite, as is the taller, Fragrant Plantainlily *(Hosta plantaginea),* whose light yellow-green foliage and large, tubular white flowers are a familiar part of the August landscape. Less frequently encountered are the Lungworts, relatives of the Bluebells, with the same pretty flowers, pinkish in bud opening blue, and low growing foliage which if not allowed to dry out, remains presentable throughout the summer. *Pulmonaria angustifolia* has azure-blue flowers and dark leaves; *P. saccharata,* pink flowers and showy green, white-spotted foliage. Both are fine for semi-shaded spots in rich soil. It is with some hesitation that we mention the Creeping Buttercup, *Ranunculus repens,* wandering ground cover with a penchant

Ground Covers, a study in textures.

Japanese Spurge *(Pachysandra terminalis),* upper left; Dwarf Lace Plant *(Polygonum reynoutria),* upper right; Whiterim Blunt Plantainlily *(Hosta decorata marginata)* lower left; and Barts Bigleaf Periwinkle *(Vinca minor* 'Barts Bigleaf'), lower right.

for getting out of bounds. Only in the most difficult planting sites would we recommend its use even though its glistening golden-yellow buttercups are cheery and its dark foliage good looking. Violets are another shade tolerant group which must be used with restraint lest their wandering habits cause trouble. For its exceptional floriferousness we like the Confederate Violet *(Viola papilionacea priceana),* with large, blue-eyed, white blooms and luxuriant foliage.

Ground Covers for well drained locations in full sun

Plants with Evergreen Foliage

Grassy banks with a tendency to burn in summer, steep cuts demanding erosion control, or just dry spots in full sun where nothing wants to grow, call for use of an entirely different group of plants from those just discussed. And, as with the shade tolerant subjects, there are types for every purpose.

Look to the Juniper clan for evergreen foliage covers able to take sun and wind. Given good drainage, they are often the ideal solution to the intelligent treatment of steep banks and slopes. Such old standbys as the creeping, gray-blue toned Waukegan Juniper *(Juniperus horizontalis douglasi),* and the taller Andorra Juniper *(Juniperus horizontalis plumosa),* whose purplish-plum winter color is well known, are always good. So, too, is the ground hugging Bar Harbor Juniper *(Juniperus horizontalis* 'Bar Harbor'), whose dense foliage retains its gray-green color all year. Taller and more dramatic in appearance is the distinctive Japgarden Juniper *(Juniperus procumbens),* sharp bluish-needled species which may reach a height of twenty inches in the center of the plant with trailing side branches which are almost procumbent.

Plants with Deciduous Foliage

A sunny terrace where the soil is light and the drainage good provides the perfect setting for the Silver Mound Artemisia *(Artemisia schmidtiana nana),* fine-textured, soft-leaved perennial of delightful appearance. Individual plants form symmetrical silvery-gray mounds a foot high and eighteen inches or so across. With the Prostrate Rock Cotoneaster *(Cotoneaster horizontalis)* not reliably hardy in this area, either the Early Cotoneaster *(c. adpressa praecox)* or the Cranberry Cotoneaster *(c. apiculata)* must be substituted. Both are of taller, mounded growth, but with the same rounded, glossy-green leaves, pinkish flowers and red fruit. Full sun and perfect drainage are their basic requirements. One of the most interesting cover plants from the standpoint of form and color is the Blue Fescue *(Festuca glauca),* a tufted grass of distinctive bluish-green color. And, of all the plants mentioned, it is the only one requiring winter protection locally. A sandy soil in full sun will increase its chances of survival. If a ground cover has showy flowers, its desirability is obviously enhanced appreciably. Such is true of the Tenore Candytuft *(Iberis tenoreana),* a perennial Southern European species with deep green whorled foliage and abundant white flowers. Unlike the other Candytufts, it roots readily

from cuttings. Lacking the aggressiveness of most Polygonums, the Dwarf Lace Plant or Japanese Fleeceflower *(Polygonum reynoutria)*, has unusually interesting squarish foliage, red tinged as it unfolds in the spring, light green in summer and reddish again in the fall. The pink flower sprays are autumn borne. It establishes itself rather quickly by underground runners. The Max Graf and Memorial Roses *(Rosa rugosa* 'Max Graf' and *Rosa wichuraiana)*, are two excellent woody covers for sunny slopes. The former is a bushy, trailing plant (to two feet) with typically glossy rugosa foliage and large (three inch diameter), single pink, golden-centered flowers in June. The Memorial Rose is a more prostrate species (one foot), with long creeping branches, highly lustrous dark green leaves of fine texture and fragrant white flowers in few to many-flowered corymbs. Stonecrop, the common name of the genus Sedum, seems to suggest a dry, well-drained location in full sun, which is exactly what most species prefer. *Sedum rupestre* (syn. *elegans*), a particularly handsome one three or four inches tall, has fleshy, blue-green leaves and bears flat heads of yellow flowers in early summer. Also sunlovers are the Thymes, prostrate covers admired for their fragrance, flavor and flowers. Thriving as they do on heat and sand they are the answer to the often asked question, "What can I use on sandy banks or slopes or between flagstones in walks and terraces?". Warmth intensifies their foliage fragrance, as does traffic, for they can be walked on without injury to the plants. Tiny leaves and white flowers are characteristic of the three-inch, mat forming white Thyme *(Thymus serpyllum album)*, which we consider one of the best.

E. L. Kammerer

In Memory

MR. STERLING MORTON

August 25, 1885 — February 24, 1961

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